

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

VISION BIOSYSTEMS (USA) TRADING, INC.,

Plaintiff,

v.

VENTANA MEDICAL SYSTEMS, INC.,

Defendant.

CIVIL ACTION NO. 03-CV-10391-GAO

VENTANA MEDICAL SYSTEMS, INC.

Plaintiff,

v.

VISION BIOSYSTEMS, INC.,

Defendant.

CIVIL ACTION NO. 05-CV-10614-GAO

**VENTANA MEDICAL SYSTEMS, INC.'S RESPONSE TO
VISION'S MOTION FOR LEAVE TO SERVE EXPERT REPORT**

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Ventana does not oppose Vision's motion for leave to serve the Balis Report,¹ *provided* that this new expert validity discovery is properly limited. Accordingly, Ventana submits a proposed order herewith, granting Vision leave to serve the Balis Report but ordering that no further discovery on validity shall be permitted beyond rebuttal reports and expert depositions directed to the same subject matter. As described below, this form of order is necessary to prevent further prejudice to Ventana.

Vision initiated this litigation by filing a complaint seeking declaratory judgment of invalidity of the '861 patent.² By filing its complaint, Vision certified to this Court that it had evidentiary support for its assertion of invalidity, no later than March 2003. Yet, each time expert discovery on the issue of validity has closed (twice, so far), Vision has asked for another chance.

Vision's most recent attempt to reopen expert validity discovery was ostensibly occasioned by the *KSR* case.³ To be sure, *KSR* did change the judicial standards applied to the issue of obviousness, and for that reason, Ventana does not oppose Vision's request for leave to serve the Balis Report. However, it is equally clear that *KSR* was nothing more than a convenient excuse for Vision, which commenced its most recent attempt to reopen validity discovery two weeks *before* *KSR* issued.

¹ Expert Report of Ulysses G.J. Balis, M.D., attached as Exhibit 1 to Vision's Memorandum in Support of Its Motion for Leave to Serve the Attached Expert Report From Dr. Balis on the Issue of Obviousness (May 7, 2007) (Docket No. 158 in 03-CV-10391-GAO; Docket No. 55 in 05-CV-10614-GAO) ("Vision Br.").

² Complaint for Declaratory Judgment (Mar. 3, 2003) (Docket No. 1 in 03-CV-10391-GAO). Case Nos. 03-CV-10391-GAO and 05-CV-10614-GAO have been consolidated. *See, e.g.*, Stipulation and Revised Scheduling Order, at 1 (Nov. 3, 2005) (Docket No. 39 in 05-CV-10614-GAO).

³ *KSR Int'l Co. v. Teleflex, Inc.*, 127 S.Ct. 1727 (2007).

Vision's latest attempt to reopen expert validity discovery comes nearly three years after expert discovery was originally slated to close. With the parties now focused on completing fact discovery relating to infringement by Vision's second accused device⁴ and preparing for a November 2007 trial, Vision's motion for leave to serve an additional expert report on validity, if granted, must be strictly limited to prevent further prejudice to Ventana.

I. BACKGROUND FACTS

Vision initiated this litigation in March 2003 by seeking a declaratory judgment of invalidity of the '861 patent. Ventana counterclaimed for infringement. Vision was found to infringe in September 2004.⁵

A. Expert Validity Discovery Was Completed in 2004

Expert reports on the issue of validity were timely served in this case by the original June 2004 deadline.⁶ Vision submitted an opening expert report by Mr. Koebler, and Ventana submitted rebuttal expert reports by Dr. Sharon and Dr. Hicks. All three experts were deposed in July 2004. By September 2004, Vision accurately represented to the Court that "discovery has been completed."⁷

⁴ The first accused device was found to infringe on summary judgment. *See* Memorandum and Order (Sept. 30, 2004) (Docket No. 103 in 03-CV-10391-GAO).

⁵ *Id.*

⁶ *See* Clerk's Notes (May 27, 2003) (Docket No. 23 in 03-CV-10391-GAO); Transcript to November 25, 2003 Status Conference, at 15:3-4 (Mar. 8, 2004) (Docket No. 68 in 03-CV-10391-GAO); Electronic Order (June 25, 2004).

⁷ Unopposed Motion for Rule 16(b) Status Conference, at 1 (Sept. 21, 2004) (Docket No. 101 in 03-CV-10391-GAO). Because Case No. 05-CV-10614-GAO was later consolidated with Case No. 03-CV-10391-GAO, there has been subsequent discovery relating to infringement by the second accused device.

B. Vision's First Attempt to Reopen Expert Validity Discovery

In January 2005, Vision sought, and the Court granted, leave for Vision to submit a supplemental expert report on the issue of validity.⁸ This necessitated supplemental expert reports by Mr. Koebler, Dr. Sharon, and Dr. Hicks, as well as a second round of depositions for all three experts in May and June 2005. At the July 2005 Final Pre-Trial Conference, Ventana's counsel explained to the Court: "Validity is already discovered. It's closed, we're ready to try it."⁹ Trial, originally set for July 2005, was rescheduled for November 2005. The parties intended to proceed to trial on the issue of "validity as it's already been discovered."¹⁰

C. Vision's Second Attempt to Reopen Expert Validity Discovery

In March 2005, Vision attempted to reopen expert validity discovery through a purported supplemental disclosure of witnesses.¹¹ The Court refused to permit this new expert discovery.¹² Trying to make the most of the Court's ruling, Vision sought to extract procedural concessions from Ventana in exchange for promising in September 2005 "not to call Dr. Horne or anyone not disclosed in Vision I as a witness to testify on matters of patent validity."¹³

⁸ Transcript to January 12, 2005 Status Conference, at 16:2-20 (Feb. 25, 2005) (Docket No. 107 in 03-CV-10391-GAO) ("1/12/05 Hearing Tr.").

⁹ Transcript to July 20, 2005 Final Pretrial Conference, at 5:12-13 (Aug. 15, 2005) (Docket No. 126 in 03-CV-10391-GAO).

¹⁰ *Id.* at 9:10-22.

¹¹ See Memorandum in Support of Defendant's Motion to Strike Plaintiff's Untimely Disclosure of Witnesses, at 9-11 (Apr. 5, 2005) (Docket No. 109 in 03-CV-10391-GAO).

¹² Electronic Order (May 24, 2005).

¹³ Exhibit H to the First Declaration of Douglas E. Ringel in Support of Vision's Motion for Leave to Serve the Attached Expert Report from Dr. Balis on the Issue of Obviousness (May 7, 2007) (Docket No. 159 in 03-CV-10391-GAO; Docket No. 56 in 05-CV-10614-GAO) ("Ringel Decl.").

D. Vision's Third Attempt to Reopen Expert Validity Discovery

Trial in this matter was delayed due to an erroneous claim construction issued by a District Court in Arizona, which was later reversed.¹⁴ The Arizona claim construction did not affect either party's position on validity.¹⁵ After the Court of Appeals vacated the Arizona court's order, trial was reset for November 2007. As Ventana's counsel explained to the Court at the February 2007 status conference: "we're back on track to start ... where we left off. Where things stood at that point in time is validity discovery was completed in spring of 2005."¹⁶ Vision provided no indication to Ventana or the Court that it intended to reopen expert validity discovery.

Then, in April 2007 – nearly three years after expert validity discovery closed for the first time and nearly two years after expert validity discovery closed for a second time – Vision proposed yet another round of expert discovery on the issue of validity.¹⁷ In the midst of its efforts to reopen expert validity discovery, the *KSR* case issued. With this fortuitously-timed excuse in hand, Vision offered the Balis Report as an exhibit to its motion, couched in language borrowed from *KSR*.

¹⁴ See Transcript to February 21, 2007 Status Conference, at 4:3-13 (Mar. 5, 2007) (Docket No. 154 in 03-CV-10391-GAO) ("2/21/07 Hearing Tr."); see also Exhibit A to Joint Status Report, Stipulation, and [Proposed] Order (Jan. 11, 2007) (Docket No. 151 in 03-CV-10391-GAO; Docket No. 50 in 05-CV-10614-GAO).

¹⁵ Vision implies that circumstances "have changed substantially" due to the Arizona case. Vision Br. at 4-5. That is incorrect. The only relevant circumstance occasioned by the Arizona case is the procedural delay that has given Vision time to try to reopen expert validity discovery yet again. Vision's efforts most certainly were not motivated by *KSR*, which did not issue until weeks after Vision commenced its latest effort to reopen expert validity discovery. Compare Ringel Decl., Ex. J (letter dated April 16, 2007; "In our view, some limited additional supplemental expert discovery on the issue of obviousness is warranted, as described below.") with Ringel Decl., Ex. A (*KSR* issued on April 30, 2007).

¹⁶ 2/21/07 Hearing Tr. at 4:14-16.

¹⁷ Ringel Decl., Ex. J at 2-3.

II. ARGUMENT

Ventana recognizes that *KSR* changed the judicial standards applied to the issue of obviousness. Thus, because at least portions of the Balis Report are ostensibly directed to issues from *KSR*,¹⁸ Ventana does not oppose Vision’s request for leave to serve the Balis Report, assuming that new expert validity discovery is properly limited.

There is good cause for an order that limits the scope of Vision’s newly proposed expert validity discovery. As it stands, the Balis Report already attempts to retread old ground. For example, the Balis Report extensively comments on the topic of “commercial success” as an objective indicia of nonobviousness.¹⁹ As evidenced by the Joint Pre-Trial Memorandum, filed in July 2005, Vision has long been on notice of Ventana’s position on commercial success.²⁰ Likewise, the Balis Report also offers an invalidity analysis based on the McCulloch reference,²¹ a patent that has been publicly available for fifteen years.²² Vision has been in possession of the McCulloch reference for at least three years.²³

¹⁸ See, e.g., Balis Report at 2 (Questions (A)-(C)).

¹⁹ *Id.* at 8-9.

²⁰ See Joint Pre-Trial Memorandum, at 3-4 (July 13, 2005) (Docket No. 119 in 03-CV-10391-GAO) (“[T]he evidence will show strong objective evidence of nonobviousness. These ‘objective indicia’ include commercial success of the invention....”).

²¹ Balis Report at 9-10.

²² Ringel Decl., Ex. P.

²³ Vision makes the artfully-worded assertion that it “received materials *relating to* McCulloch on January 11 & 15, 2005.” Vision Br. at 15 n.4 (emphasis added). What it fails to tell the Court is that it already had a copy of McCulloch no later than April 2004. See Exhibit A, attached hereto. And even if the additional documents “relating to” McCulloch could otherwise justify reopening expert validity discovery, Vision still offers no excuse for its subsequent delay of over two years.

Vision nevertheless sought to reopen expert validity discovery by requesting Ventana to update its document production on “commercial success,”²⁴ and when Ventana agreed to do so, arguing that supplemental expert discovery was necessary because “just last week Ventana itself produced additional documents highly pertinent to commercial success.”²⁵ An order limiting expert validity discovery is necessary so that requests for updated document productions cannot be used as a ruse to justify revisiting expert validity discovery.

Vision erroneously suggests that the parties reached agreement that *KSR* “requires supplemental expert reports on obviousness”²⁶ and that Ventana’s supposed “agreement to the parties’ exchanging new expert reports on obviousness” included “Vision’s engineering expert.”²⁷ Proposals were exchanged during the course of meet and confer, but no agreement was reached.²⁸ Instead, without ever providing a copy of the Balis Report during these meet and confer discussions, Vision filed its motion for leave. Vision cannot now pretend that it has an invitation for open-ended supplementation. Vision’s *third* expert report challenging the validity of the ‘861 patent should be its last.

Additionally, should the Court grant Vision leave to serve the Balis Report, the schedule for the resulting follow-up expert discovery should be clearly delineated. First, since Vision bears the burden of proof on the issue of obviousness, Ventana is entitled to serve rebuttal expert reports. Second, rebuttal expert reports on validity should be due at the same time other rebuttal

²⁴ Ringel Decl., Ex. I at 3.

²⁵ Vision Br. at 11-12.

²⁶ *Id.* at 5.

²⁷ Ringel Decl. ¶ 3.

²⁸ Ringel Decl., Ex. M at 1 (“I presented the following proposal as a compromise in an attempt to amicably resolve the present dispute regarding the status of expert validity discovery in *Vision I*.”)

expert reports will be due on the issue of infringement, particularly since the same experts may address more than one issue. Vision acknowledges that such a schedule is required to prevent prejudice to Ventana.²⁹ Finally, the Court should order that any depositions of Ventana's rebuttal experts may not retread subject matter already covered by their prior expert reports. Due to Vision's repeated attempts to reopen expert validity discovery, Ventana's expert witnesses on the issue of validity have already been deposed twice, and any further depositions should be appropriately limited. *See* Fed. R. Civ. P. 30(a)(2)(B).

The "courts must deal decisively" with a party's failure to abide by expert disclosure requirements, and "the required sanction in the ordinary case is mandatory preclusion." *Lohnes v. Level 3 Commc'ns, Inc.*, 272 F.3d 49, 60 (1st Cir. 2001). The history of the litigation, including prior failures to comply with expert discovery deadlines, must be considered in formulating the appropriate sanction. *Santiago-Díaz v. Laboratorio Clínico y de Referencia del Este*, 456 F.3d 272, 276 (1st Cir. 2006). Limits are particularly appropriate where a party has previously been granted extensions on expert discovery. *Alves v. Mazda Motor of Am., Inc.*, 448 F. Supp. 2d 285, 296 (D. Mass. 2006).

When Vision requested (and was granted) a second round of expert validity discovery in January 2005, its counsel assured the Court that "I rather doubt that any additional discovery is

²⁹ Vision Br. at 6 ("In order to avoid any claim of prejudice from Ventana, Vision is submitting the Balis Report at this early date, well in advance of upcoming expert discovery and long before trial."). Vision incorrectly represents that the parties have agreed upon specific dates for expert reports and depositions on the issue of infringement. *Id.* at 5. While Ventana agrees that rebuttal expert reports should be due no earlier than July 12, 2007, Ventana also indicated that the tentative dates discussed by the parties may need to be moved back if the scope of expert discovery were to expand. *See* Exhibit B, attached hereto ("[O]ur agreement on dates was based on validity discovery – expert and otherwise – being closed. To the extent the Court allows Vision to re-open validity discovery, then we will need to move the dates related to expert discovery and summary judgment briefing back."). By default, rebuttal expert reports are normally due 60 days before the trial date. *See* Fed. R. Civ. P. 26(a)(2)(C).

going to be required.”³⁰ Nevertheless, Vision used the supplemental expert validity discovery as an opportunity to take a second deposition of each of Ventana’s rebuttal validity experts. This time, Ventana faces a third round of expert validity discovery and the prospect that its rebuttal validity experts will be deposed a third time. There can be no doubt that Ventana has been prejudiced. *See Boucher v. Northeastern Log Homes, Inc.*, No. Civ. 04-84-P-C, 2005 WL 758470, at *4 (D. Me. Mar. 8, 2005) (“It is absolute prejudice to the Defendant to sustain the expense of a deposition of an expert only to have her opinion change in such a fundamental and material fashion.”). Should Vision be permitted to serve the Balis Report, Ventana is entitled to an assurance that this latest attempt to reopen expert validity discovery will be the last.

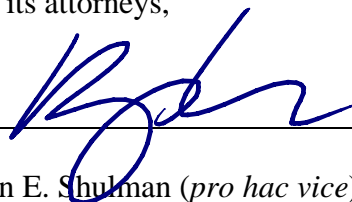
III. CONCLUSION

Should the Court grant Vision leave to serve the Balis Report, Ventana respectfully requests that the Court enter the accompanying form of proposed order, limiting the new expert validity discovery to the Balis Report, rebuttal expert reports responsive thereto, and deposition testimony relating only to the subject matter of the new reports.

Dated: May 16, 2007

VENTANA MEDICAL SYSTEMS, INC.

By its attorneys,



Ron E. Shulman (*pro hac vice*)

Roger J. Chin (*pro hac vice*)

WILSON SONSINI GOODRICH & ROSATI

Professional Corporation

650 Page Mill Road

Palo Alto, California 94304

(650) 493-9300

³⁰ 1/12/05 Hearing Tr. at 14:3-4.

Nicole W. Stafford (*pro hac vice*)
WILSON SONSINI GOODRICH & ROSATI
Professional Corporation
8911 Capital of Texas Highway North
Westech 360, Suite 3350
Austin, Texas 78759
(512) 338-5400

Brian L. Michaelis (BBO #555159)
BROWN RUDNICK BERLACK ISRAELS, LLP
One Financial Center
Boston, Massachusetts 02111
(617) 856-8200

Jeffrey N. Danis (BBO #113880)
VENTANA MEDICAL SYSTEMS, INC.
1910 Innovation Park Drive
Tucson, Arizona 85737
(520) 229-3965

CERTIFICATE OF SERVICE

I hereby certify that this document filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF) and paper copies will be sent to those indicated as non registered participants on May 16, 2007.



Roger J. Chin

DECLARATION

I, Roger J. Chin, declare as follows:

1. I am a member of the law firm of Wilson Sonsini Goodrich & Rosati, counsel to Ventana Medical Systems, Inc. I have personal knowledge of the facts set forth below.

2. Attached as Exhibit A hereto is a true and correct copy of a letter and selected enclosures from Judy Day to Elizabeth Leff, counsel for Vision, dated April 5, 2004.

3. Attached as Exhibit B hereto is a true and correct copy of an email from Nicole Stafford to Douglas Ringel, counsel for Vision, dated April 23, 2007.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 16, 2007, at San Francisco, California.



Roger J. Chin

**IN THE UNITED STATES DISTRICT COURT
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Plaintiff,

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VENTANA MEDICAL SYSTEMS, INC.,

Defendant.

CIVIL ACTION NO. 03-CV-10391-GAO

VENTANA MEDICAL SYSTEMS, INC.

Plaintiff,

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VISION BIOSYSTEMS, INC.,

Defendant.

CIVIL ACTION NO. 05-CV-10614-GAO

[PROPOSED] ORDER

Having considered the motion of Vision BioSystems, Inc. for leave to serve the Balis Report, and Ventana's response thereto, the Court orders as follows:

1. Vision is granted leave to serve the Balis Report, in the form attached as Exhibit 1 to Vision's Memorandum in Support of Its Motion for Leave to Serve the Attached Expert Report From Dr. Balis on the Issue of Obviousness.

2. No later than the deadline agreed by the parties to serve rebuttal expert reports, or no later than 60 days before the trial date if no such agreement is reached, Ventana shall serve rebuttal expert reports responsive to the Balis Report.

3. The depositions of experts who submit expert reports pursuant to paragraphs 1 and 2 above shall be limited to the subject matter of their reports, and no expert may be deposed on subject matter set forth in their prior expert reports.

4. Except for expert discovery set forth in paragraphs 1 through 3 above, expert discovery relating to validity is closed.

IT IS SO ORDERED.

Dated: _____

HON. GEORGE A. O'TOOLE, JR.
UNITED STATES DISTRICT JUDGE

W&GR Wilson Sonsini Goodrich & Rosati
PROFESSIONAL CORPORATION

650 Page Mill Road
Palo Alto, CA 94304-1050
PHONE 650.493.9300
FAX 650.493.6811
www.wsgr.com

April 5, 2004

BY FEDERAL EXPRESS

Elizabeth A. Leff, Esq.
Rothwell, Figg, Ernst & Manbeck P.C.
1425 K Street, N.W.
Suite 800
Washington, D.C. 20005

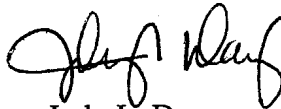
**Re: *Vision BioSystems (USA) Trading, Inc. v. Ventana Med. Sys., Inc.*,
Case No. 03-CV-10391-GAO (D. Mass.)**

Dear Ms. Leff:

Enclosed please find documents Bates numbered VEN 1003494 – 1005783. Please contact Roger Chin if you have any questions.

Sincerely,

WILSON SONSINI GOODRICH & ROSATI
Professional Corporation



Judy L. Day
Senior Paralegal

Encl.

cc: Roger J. Chin, Esq.



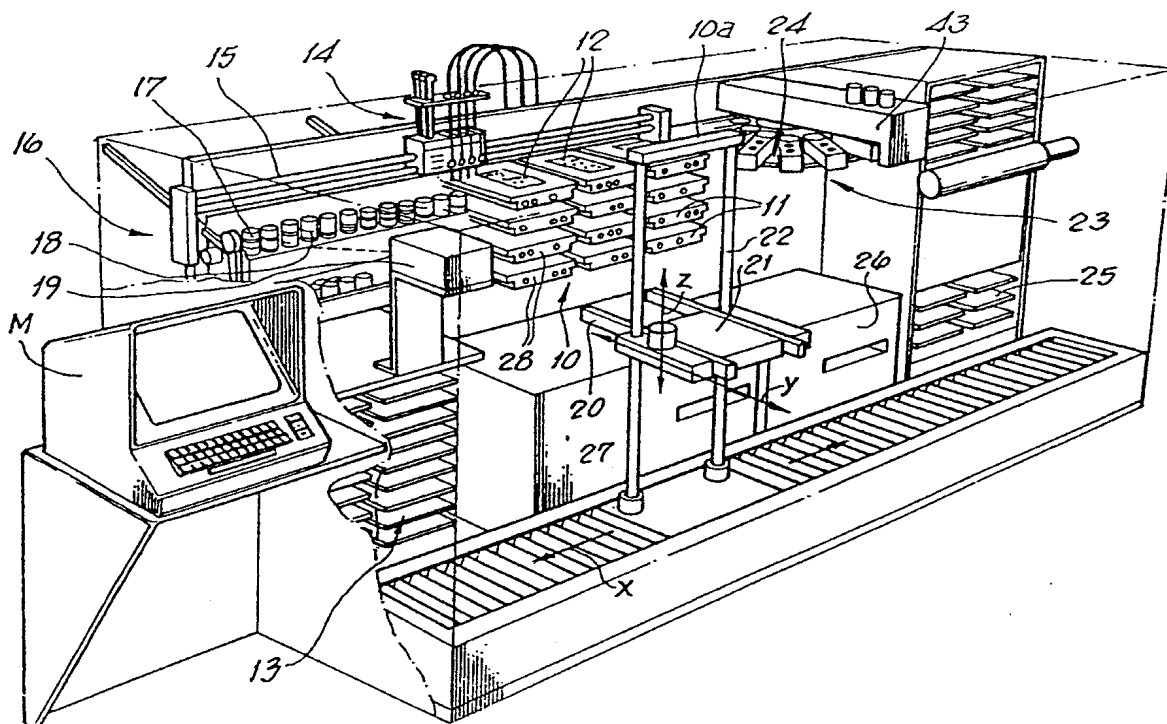
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United States Patent [19]**McCulloch et al.**[11] **Patent Number:** **5,122,342**[45] **Date of Patent:** **Jun. 16, 1992**[54] **BIO-FLUID ASSAY APPARATUS**[75] Inventors: **Peter F. McCulloch**, Wilmslow;
Robert J. F. Moore, Stockport, both
of England[73] Assignee: **Quatro Biosystems Limited**,
Manchester, England[21] Appl. No.: **378,968**[22] Filed: **Jul. 12, 1989**[30] **Foreign Application Priority Data**

Jul. 16, 1988 [GB] United Kingdom 8816982.6

[51] Int. Cl.⁵ **G01N 35/04**[52] U.S. Cl. **422/65; 422/67;**
364/497; 436/47; 436/48; 436/808[58] Field of Search **422/65, 67, 63;**
364/497; 436/47, 48, 808[56] **References Cited****U.S. PATENT DOCUMENTS**3,917,455 11/1975 Bak et al. 422/67
4,279,861 7/1981 Jessop 364/497
4,582,990 4/1986 Stevens 422/654,676,951 6/1987 Armes et al. 422/65
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4,849,176 7/1989 Sakagami 422/65
4,952,518 8/1990 Johnson et al. 422/65*Primary Examiner*—Lynn Kummert*Attorney, Agent, or Firm*—Watts, Hoffmann, Fisher &
Heinke[57] **ABSTRACT**

There is disclosed micro-processor controlled bio-fluid assay apparatus wherein microtitre plates are on carriers having machine readable labels and wherein the samples of bio-fluid and reagent dispensers also preferably carry machine readable labels whereby the micro-processors which controls movement of the plates through the apparatus can verify correct operation thereof. Movement of the plates is effected by a plate carrier transfer mechanism which has the ability to move the plate carriers in any order and in either direction along each of the x,y and z axes.

12 Claims, 2 Drawing Sheets

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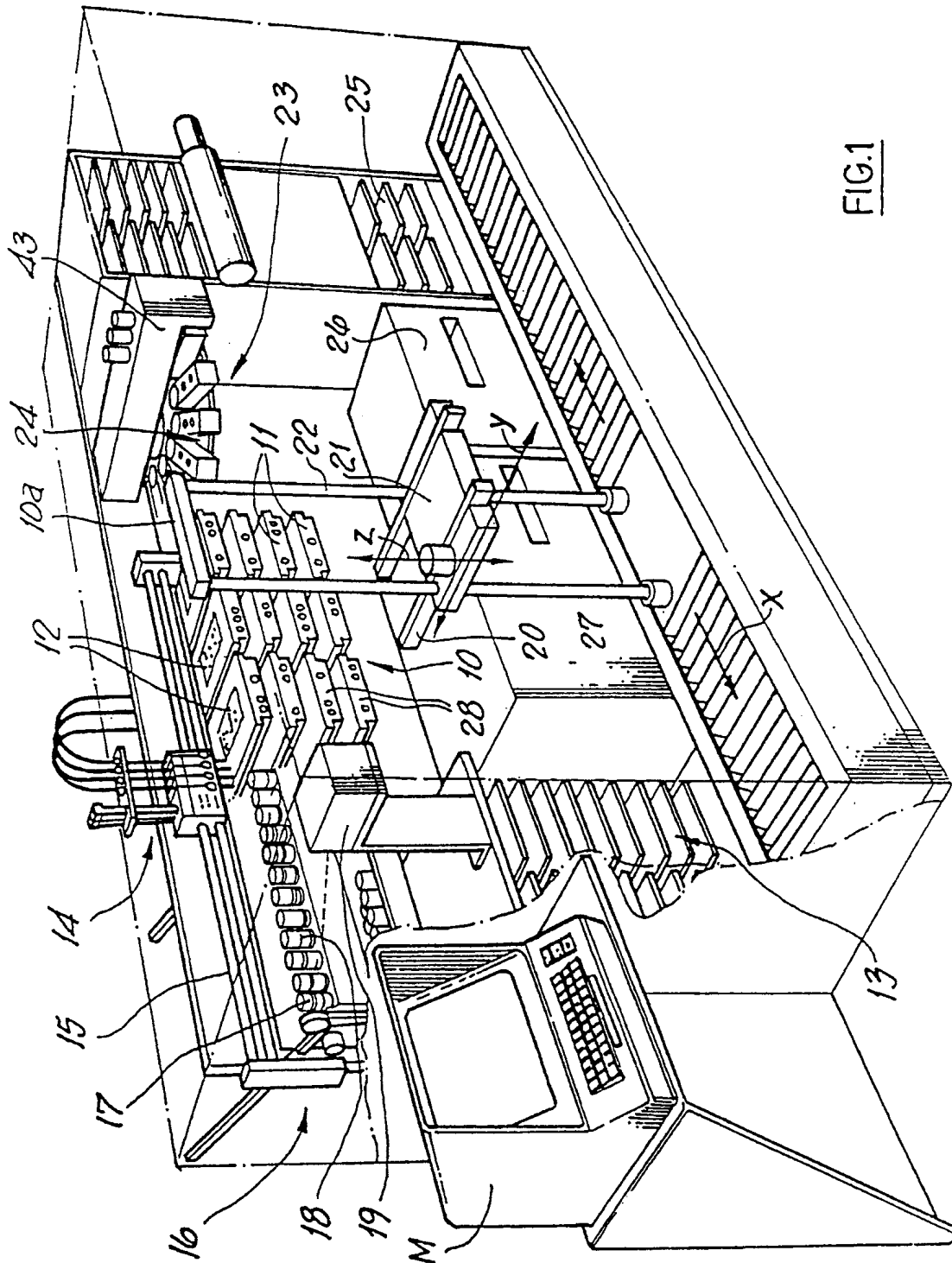


FIG.1

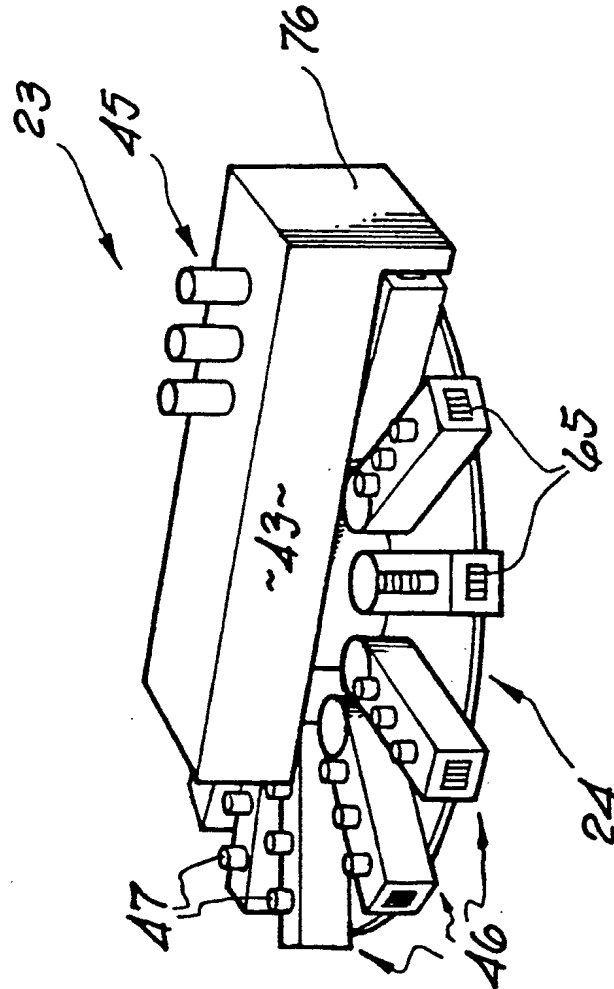


FIG. 2

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BIO-FLUID ASSAY APPARATUS

This invention relates to bio-fluid assay apparatus of the kind (hereinafter termed of the kind referred to) wherein measured samples of bio-fluid, for example serum, are introduced into the wells of a microtitre plate (hereinafter "plate") for subsequent chemical reaction and analysis.

A principal use of apparatus of the kind referred to is the carrying out of immuno-assay tests of serum, the wells of the plates being dosed with antibodies appropriate to the tests to be performed, suitable chemical reagents then being added prior to incubation washing and reading.

It is an object of the present invention to automate the operation of apparatus of the kind referred whilst ensuring a high level of security against error.

According to the present invention there is provided a bio-fluid assay apparatus of the kind wherein measured samples of bio-fluid, for example serum, are introduced into the wells of a microtitre plate for subsequent chemical reaction and analysis, comprising:

- a micro-processor controller which may be input with details of patients and the tests required;
- a plurality of discrete plate carriers;
- an input magazine for said carriers;
- an output magazine for said carriers;
- a number of operational stations intermediate said input magazine and said output magazine;

- plate carrier transport means which is controlled by the micro-processor for collecting plate carriers from the input magazine and progressing them through the successive operational stations and delivering them to the output magazine;

- each plate carrier having a uniquely indentifying machine readable label which by reference to the data held by the micro-processor will indicate the particular type of the assay to be effected on the samples carried by the plate; and the transport means including means for reading said labels whereby the micro-processor control means can verify that each carrier taken from the input magazine was loaded and is selected correctly and can confirm the validity of other movements during the assay cycle.

A first operational station may be a transfer station at which the plates receive measured samples of bio-fluid transferred from a sample receiving section by an automatic pipette arrangement.

The sample receiving section may include a reader for machine readable labels on sample tubes to confirm that such are correctly loaded into the sample receiving section.

Other operational stations may include a station where chemical reagents are added to the plates by a reagent dispensing arrangement, a multiplate incubator, a plate washer and a plate reader. The incubator may be of the shaking kind.

The reagent dispensing arrangement may comprise an indexable dispensing head.

The head may comprise a plurality of reagent dispensers, which may be automatic pipettes, any one of which may be indexed to a dispensing position.

The pipettes may have multiple reagent exits.

The dispensing arrangement may further comprise a machine readable label associated with each reagent dispenser and indicating the identity of the reagents

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carried thereby and a label reader at the dispensing position.

The reagent dispensers may be operated by a simple set of powered piston plungers at the dispensing position.

The invention will be further apparent from the following description with reference to the figures of the accompanying drawings, which show, by way of example only, one form of bio-fluid assay apparatus embodying same.

Of the drawings

FIG. 1 shows a perspective diagrammatic view of the bio-fluid assay apparatus according to the invention; and

FIG. 2 shows a detail of the reagent dispensing station of the apparatus of FIG. 1.

The apparatus is controlled by a suitably programmed micro-processor M, which is input with details of patients and the tests required for example Thyroid, Fertility, Steroid, HIV, Hepatitis and so on. Each test may require a plurality of separate assays. An operator will be directed by the micro-processor to load the apparatus with appropriate plates and samples of the patients' bio-fluids on specified carriers at specified locations. Thereafter the transfer of bio-fluid to the plates and progress of the plates through the various operational stations is under the control of the micro-processor which will give a print-out of all completed test results. In general the micro-processor will determine the order in which different assays will be performed to optimize throughput having regard to different residence time requirements at different operational stations for the different assays and other factors.

Turning now to FIG. 1, it will be seen that the apparatus has an input magazine generally indicated at 10 for plate carriers 11 each loaded with a microtitre plate 12, and an output magazine 13 which receives the carriers 11 after they have passed through the various operational stations of the apparatus.

The uppermost tier 10a of the input magazine 10 defines a transfer station at which the wells of the plates are dosed with measured volumes of bio-fluid transferred thereto by a multi-head automatic pipette arrangement generally indicated at 14 and indexable along the x-axis on rails 15 between the transfer station and a sample receiving section 16 loaded with tubes 17 of sample. The arrangement 14 is also indexable along the y-axis so that the pipette tips can register with any desired wells in a plate located on a carrier at the transfer station. The pipette tips are themselves movable along the z-axis as is obviously necessary for collection and delivery of sample. The pipette tips may be automatically exchanged or washed after each use in known manner. The tubes 17 carry bar-coded labels 18 (preferably printed under control of the micro-processor at the time of data input). A laser bar-code reader 19 which reports to the micro-processor M is provided to verify that the operator has positioned the sample tubes 17 in the receiving section at the locations directed.

Essentially the apparatus includes a plate carrier transfer mechanism comprising a fork 20 advanceable and retractable along the y-axis to engage with the underside of or be withdrawn from beneath a selected plate carrier. The fork 20 moves along the y-axis relative to a support 21 movable upwardly and downwardly along the z-axis relative to a support pillar 22 itself movable from side to side along the x-axis.

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In accordance with the invention each of the plate carriers 11 carries a uniquely identifying machine readable label 28 which by reference to the data held by the micro-processor M will indicate the particular type of assay which the plate carried thereby is to undergo. The support 21 carries a reader for the labels 28 and this reader reports to the micro-processor on the identity of each carrier 11 which the fork 20 engages.

In this way the micro-processor can verify that the operator has positioned plate carriers 11 loaded with plates as directed and confirm the validity of other movements during the assay cycle.

Movement of the fork 20 along all three axes is under the control of the micro-processor to collect plate carriers from the input magazine 10 and position them in the transfer station and after they have been dosed with sample move them to a station generally indicated at 23 where reagents appropriate for the assays to be effected are dispensed into the wells of the plates from a rotatably indexable dispensing head 24.

The station 23, shown in more detail in FIG. 2, comprises an indexable dispensing head 24 rotatably mounted below a stationary module 43. The head 24 is indexed by commands from the micro-processor M. The head 24 comprises a plurality of arms 46 radially extending from its centre of rotation, each arm having a machine readable label 65 located on the face of the distal end thereof, said label 65 being indicative of the reagent carried. The label 65 is read by a label reader 76 attached to the module 43, which reports to the micro-processor M, enabling verification that the correct reagents are dispensed to the correct wells of each plate presented at the station 23.

Each of the arms 46 comprises a plurality of reagent dispensers in the form of multi-channel pipettes 47. The pipettes 47 are filled from containers of stock reagents which may be located in the arms 46. Preferably three pipettes each possessing four reagent exit channels are located in each of the arms 46.

The module 43 has a plurality of powered piston plungers 45 located therein and extensible therethrough to engage with the pipettes 47. The plungers 45 are actuated, as directed by the micro-processor after verification of the labels 65 to operate the pipettes 47.

Whilst the reagents are being dispensed the plate carriers remain supported by the fork which executes necessary step movements in the x and y directions.

The fork 20 then moves the plate carrier into an incubator 25 and deposits it for the required residence time before collecting it for transfer to a washer 26 and reader 27 in turn. The incubator may have a variable heat control and may include a refrigerated zone, since it may be desired to carry out the colourmetric stage of some assays, for example the peroxidase catalysed cleavage of 3,3',5,5'-Tetramethylbenzidine Dihydrochloride, at temperatures below room temperature.

The plate carriers may remain supported by the fork whilst in the washer and reader and the fork may execute necessary step movements to enable reading of all wells. Alternatively the plate carriers may be deposited in the washer for a required time and also in the reader if of suitable design. After each plate has been read, the fork 20 transfers it to the output magazine 13 wherefrom it may be retrieved by the operator to enable the used plate to be discarded (or re-read for quality control purposes, for example) a new plate mounted and the carrier repositioned in the input magazine as directed.

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The plates engage with the plate carriers such that their position thereon is precisely determined. Equally the plate carriers have projections or grooves which are engageable with complementary formations on the fork and the surfaces which support them at the various operational stations.

The labels 28 and 65 are conveniently magnetically coded and readable by an array of magnetically operable reed switches, but other kinds of label such as bar-coded labels are possible.

Apparatus, according to the invention, may be used, in addition to immuno-assay, in for example, an assay for the cell proliferative potential of bio-fluid. Cells may be seeded in the wells of the microtitre plates and cell growth or proliferation, for example, can be monitored spectrophotometrically after suitable cell staining and washing regimes. In this way, the vaso-proliferative potential of diabetic serum, for example, may be assessed.

It will be appreciated that it is not intended to limit the invention to the above example only, many variations, such as might readily occur to one skilled in the art, being possible, without departing from the scope thereof as defined by the appended claims.

We claim

1. A bio-fluid assay apparatus wherein measured samples of bio-fluid in the wells of a microtitre plate are analyzed comprising:

a micro-processor controller which may be input with data including details of patients and different assays required;

a plurality of discrete plate carriers;

a magazine for said plurality of carriers;

a plurality of operation stations including:

a reagent dispensing station for adding chemical reagents to the plates by a reagent dispensing arrangement;

a plate washing station;

a plate reading station;

plate carrier transport means constructed and arranged to move any plate carrier in either direction along each of x, y and z axes and which is controlled by the micro-processor controller for collecting plate carriers from said magazine and advancing the carriers as required through the plurality of operation stations;

each plate carrier having a uniquely identifying machine readable label which by reference to the data held by the micro-processor controller will indicate the particular type of assay to be effected on the samples carried by each plate;

the transport means including means for reading each label whereby the micro-processor controller can verify that each carrier taken from the magazine is loaded and is selected correctly and can confirm the validity of other movements of each carrier during each assay cycle; and the micro-processor controller being programmed to determine the order in which different assays are performed.

2. Apparatus according to claim 1, further including a transfer station at which each plate receives measured samples of bio-fluid transferred from a sample receiving section by an automatic pipette arrangement.

3. Apparatus according to claim 2, further comprising an incubator station.

4. Apparatus according to claim 2, wherein the sample receiving section includes a reader for machine

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readable labels on sample tubes to confirm that such are correctly loaded into the sample receiving section.

5. Apparatus according to claim 4, further comprising an incubator station.

6. Apparatus according to claim 1, wherein said reagent dispensing arrangement comprises an indexable dispensing head comprising a plurality of reagent dispensers.

7. Apparatus according to claim 6, in which the plurality of reagent dispensers are automatic pipettes, any one of which may be indexed to a dispensing position.

8. Apparatus according to claim 6, in which the dispensing arrangement further comprises machine readable labels indicating the identity of the reagents carried

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by each reagent dispenser, and a label reader at a dispensing position to verify that correct reagents are dispensed to correct plates.

9. Apparatus according to claim 8, in which powered piston plungers at the dispensing position operate the plurality of reagent dispensers.

10. Apparatus according to claim 1, further comprising a multiplate incubator.

11. Apparatus according to claim 1 further comprising a plate washer.

12. Apparatus according to claim 1, further comprising an incubator station.

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Chin, Roger

From: Stafford, Nicole
Sent: Monday, April 23, 2007 1:45 PM
To: Ringel, Douglas
Cc: Chin, Roger
Subject: Our discovery conference

Attachments: 2717351_1.pdf; Ad30cd37d-55dc-4c9a-805d-0c6e61c5bda2.PDF

Doug,

Attached is the correspondence to which I referred during our call. This documents the agreement reached between Vision and Ventana that Ventana's supplementation of its document production related to commercial success would not re-open validity discovery. As is clear from this correspondence, Vision expressly agreed it would not call anyone to testify on matters related to patent validity not already disclosed in the first Vision case. We believe your current attempt to have Dr. Balis testify on matters of patent validity is contrary to this agreement. It is also clear from this and other correspondence, the parties' discovery stipulation and statements to the Court that Vision agreed in Vision II that validity discovery was closed and that, absent the Court granting Vision's motion for reconsideration of the Court's order granting Ventana's motion to strike Vision's untimely disclosure of witnesses (which motion for reconsideration was denied), Vision would not seek to re-open validity discovery in this litigation - expert or otherwise. Vision has already re-opened expert validity discovery once at great expense to Ventana. We do not believe any facts or circumstances outlined in your letter of April 16 warrant yet another re-opening of expert validity discovery.

Please confirm that Vision will abide by its agreement and not seek to re-open expert validity discovery so that we may finalize the stipulated schedule. Per our discussion, Ventana believes it is entitled to seek a permanent injunction during the liability phase of the trial. This was contemplated by the parties and Court when Ventana withdrew its motion for a preliminary injunction in exchange for a prompt trial on the merits to obtain the injunctive relief it sought. That being said Ventana is willing to forego seeking a permanent injunction until the remedy phase of the case if Vision agrees to not attempt to re-open validity discovery.

As also mentioned in our call, our agreement on dates was based on validity discovery - expert and otherwise - being closed. To the extent the Court allows Vision to re-open validity discovery, then we will need to move the dates related to expert discovery and summary judgment briefing back.

Please contact me with any questions or to further discuss this matter. I look forward to amicably resolving this dispute without involving the Court.

Regards,
 Nicole



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